

CLAIMS

What is claimed is:

1. A system (1), comprising: a fingerprint extractor (9), a fingerprint detector (4), a control device (7), an input device (20), a memory device (14), and an output device (24), wherein the fingerprint extractor (9) is adapted to accept a signal comprising a data stream and extract a first fingerprint of user specified data existing within the data stream, wherein the input device (20) is adapted to accept a first command to extract the first fingerprint and accept a second command to attach an associated action to the first fingerprint, wherein the memory device (14) is adapted to store the first fingerprint and the associated action, wherein the fingerprint detector (4) is adapted to accept the signal comprising the data stream, continuously extract a plurality of fingerprints from the data stream, and compare the plurality of fingerprints to the first fingerprint stored in the memory device (14) for a match between the first fingerprint and any fingerprint of the plurality of fingerprints, wherein the control device (7) is adapted to execute the associated action upon detection of a match, and wherein the output device (24) is adapted to output the data stream comprising the executed action.
2. The system (1) of claim 1, wherein feedback data is outputted to the output device (24), wherein the feedback data comprises a sample of the user specified data that has been marked by the first fingerprint, and wherein the feedback data comprises a message regarding the associated action to be executed.
3. The system (1) of claim 1, wherein the data stream comprises an audio data stream.
4. The system (1) of claim 1, wherein the data stream comprises a video data stream.
5. The system (1) of claim 1, wherein the signal comprises a television (TV) signal comprising an audio data stream and a video data stream.
6. The system (1) of claim 5, wherein the first fingerprint is associated with a commercial comprising a commercial data stream.
7. The system (1) of claim 6, wherein the first fingerprint comprises a first specified sample of the commercial data stream, wherein a second fingerprint is extracted from the commercial data stream, wherein the second fingerprint comprises a second specified sample of the commercial data stream, and wherein the associated action is

executed on a data block of the commercial stream that is between the first fingerprint and the second fingerprint.

8. The system (1) of claim 7, wherein the first specified sample and the second specified sample are video samples.

9. The system (1) of claim 7, wherein the first specified sample and the second specified sample are audio samples.

10. The system (1) of claim 7, wherein the associated action comprises muting audio data within the data block.

11. The system (1) of claim 7, wherein the associated action comprises adjusting a decibel level audio data within the data block.

12. The system (1) of claim 7, wherein the associated action comprises muting video data within the data block.

13. The system (1) of claim 5, wherein the first fingerprint is associated with a TV show comprising a TV show data stream.

14. The system (1) of claim 13, wherein the first fingerprint comprises a first specified sample of the TV show data stream, wherein a second fingerprint is extracted from the TV show data stream, wherein the second fingerprint comprises a second specified sample of the TV show data stream, and wherein the associated action is executed on a data block of the TV show data stream that is between the first fingerprint and the second fingerprint.

15. The system (1) of claim 14, wherein the first specified sample and the second specified sample are video samples.

16. The system (1) of claim 14, wherein the first specified sample and the second specified sample are audio samples.

17. The system (1) of claim 14, wherein the associated action comprises muting audio data within the data block.

18. The system (1) of claim 14, wherein the associated action comprises adjusting a decibel level audio data within the data block.

19. The system (1) of claim 14, wherein the associated action comprises muting video data within the data block.

20. The system (1) of claim 5, wherein the TV signal is selected from the group consisting of a cable TV signal, a satellite TV signal, and a standard TV signal.

21. The system (1) of claim 7, wherein the first fingerprint and the second fingerprint each comprise a string of 32 bit words.
22. The system (1) of claim 1, wherein the system (1) is a TV.
23. The system (1) of claim 1, wherein the output device (24) is a TV.
24. A method, comprising: providing a system comprising a fingerprint extractor (9), a fingerprint detector (4), a control device (7), an input device (20), memory device (14), and an output device (24); receiving by the fingerprint extractor (9) a signal comprising a data stream; receiving by the input device (20) a first command to generate a first fingerprint of specified data within the data stream; extracting by the fingerprint extractor (9) the first fingerprint of the specified data within the data stream; receiving by the input device (20) a second command to attach an associated action to the first fingerprint; storing by the memory device (14) the first fingerprint and the associated action; receiving by the fingerprint detector (4) the signal comprising the data stream and continuously extracting a plurality of fingerprints from the data; comparing by the fingerprint detector (4) the plurality of fingerprints to the first fingerprint for a match between the first fingerprint and any fingerprint of the plurality of fingerprints; and executing by the control device (7) the associated action upon a detection of a said match outputting by the output device (24) the datastream comprising the executed associated action.
25. The method of claim 24, further comprising outputting by the output device (24) feedback data, wherein the feedback data comprises a sample of the user specified data that has been marked by the first fingerprint, and wherein the feedback data comprises a message regarding the associated action to be executed.
26. The method of claim 24, wherein the data stream comprises an audio data stream.
27. The method of claim 24, wherein the data stream comprises a video data stream.
28. The method of claim 24, wherein the signal comprises a television (TV) signal comprising an audio data stream and video data stream.
29. The method of claim 28, wherein the first fingerprint is associated with a TV commercial comprising a TV commercial data stream.
30. The method of claim 29, wherein the first fingerprint comprises a first specified sample of the commercial data stream; extracting by the fingerprint extractor (9) a

second fingerprint comprising a second specified sample of the commercial data stream; and executing by the control device (7) the associated action on a data block of the commercial data stream that is between the first fingerprint and the second fingerprint.

31. The method of claim 30, wherein the first specified sample and the second specified sample are video samples.

32. The method of claim 30, wherein the first specified sample and the second specified sample are audio samples.

33. The method of claim 30, wherein the associated action comprises muting audio data within the data block.

34. The method of claim 30, wherein the associated action comprises adjusting a decibel level of audio data within the data block.

35. The method of claim 30, wherein the associated action comprises muting video data within the data block.

36. The method of claim 28, wherein the first fingerprint is associated with a TV show comprising a TV show data stream.

37. The method of claim 36, wherein the first fingerprint comprises a first specified sample of the TV show data stream; extracting by the fingerprint extractor (9) a second fingerprint comprising a second specified sample of the TV show data stream; and executing by the control device (7) the associated action on a data block of the TV show data stream that is between the first fingerprint and the second fingerprint.

38. The method of claim 37, wherein the first specified sample and the second specified sample are video samples.

39. The method of claim 37, wherein the first specified sample and the second specified sample are audio samples.

40. The method of claim 37, wherein the associated action comprises muting audio data within the data block.

41. The method of claim 37, wherein the associated action comprises adjusting a decibel level audio data within the data block.

42. The method of claim 37, wherein the associated action comprises muting video data within the data block.

43. The method of claim 28, wherein the TV signal is selected from the group consisting of a cable TV signal, a satellite TV signal, and a standard TV signal.

44. The method of claim 30, wherein the first fingerprint and the second fingerprint each comprise a 32 bit word.

45. The method of claim 30, wherein the first fingerprint and the second fingerprint each comprise a string of 32 bit words.

46. The method of claim 24, wherein the system (1) is a TV.

47. The method of claim 24, wherein the output device (24) is a TV.